The Journal of

Membrane Biology

An international journal for studies on the structure, function and genesis of biomembranes

Volume 124 1991

Editorial Board

W.R. Loewenstein, Miami, Editor-in-Chief

Q. Al-Awqati, Columbia

G. Blobel, Rockefeller

D. Branton, Harvard

P. Cuatrecasas, Warner Lambert

J.M. Diamond, California, L.A.

D. Engelman, Yale

S. Fleischer, Vanderbilt

J.G. Forte, California, Berkeley

G. Guidotti, Harvard

J. Handler, Johns Hopkins

A. Helenius, Yale

L. Heppel, Cornell

W.L. Hubbell, California, L.A.

R.B. Kelly, California, S.F.

A. Klug, Cambridge

E.A.C. MacRobbie, Cambridge

V.T. Marchesi, Yale

H.M. McConnell, Stanford

D.J. Fritts, Assistant to the Editor

S. McLaughlin, SUNY, Stony Brook

C. Miller, Brandeis

H. Murer, Zurich

G.E. Palade, California, S.D.

E. Racker, Cornell

H. Reuter, Bern

B. Sakmann, Max-Planck, Heidelberg

R.W. Schekman, California, Berkeley

S.G. Schultz, Texas

S.J. Singer, California, S.D.

C.L. Slayman, Yale

K.R. Spring, N.I.H.

C.F. Stevens, Salk Institute

W. Stoeckenius, California, S.F.

R.W. Tsien, Stanford

D. Urry, Alabama

H.H. Ussing, Copenhagen



The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publisher

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Printed in Germany

© 1991 by Springer-Verlag New York Inc.

Author Index

Adragna, N.C.: Cation Transport in Vascular Endothelial		Mummert H Gradmann D. I. El	
Cells and Aging	285	Mummert, H., Gradmann, D.: Ion Fluxes in Acetabu-	
Antonenko, Y.N., Kinnally, K.W., Tedeschi, H.: Identifi-	203	laria: Vesicular Shuttle	255
cation of Anion and Cation Dathways in the I		Murer, H., see Reshkin, S.J., et al.	227
cation of Anion and Cation Pathways in the Inner		Naumov, A.P., see Mozhayeva, G.N., et al	113
Mitochondrial Membrane by Patch Clamping of		Nelson, D.J., see Soliven, B., et al	127
Mouse Liver Mitoplasts	151	Nomura, K., Sokabe, M.: Anion Channels from Rat	
Argent, B.E., see Pollard, C.E., et al.	275	Brain Synaptosomal Membranes Incorporated into	
Avenet, P., Lindemann, B.: Noninvasive Recording of Re-		Planar Bilayers	53
ceptor Cell Action Potentials and Sustained Currents		O'Grady, S.M., Cooper, K.E., Rae, J.L.: Cyclic GMP	
from Single Taste Buds Maintained in the Tongue:		Regulation of a Voltage-Activated K Channel in Dis-	
The Response to Mucosal NaCl and Amiloride	33	sociated Enterocytes	159
Blatt, M.R.: Ion Channel Gating in Plants: Physiological		Okada, Y., see Kotera, T., et al.	43
Implications and Integration for Stomatal Function		Orsenigo, M.N., Tosco, M., Faelli, A.: Cl/HCO ₃ Ex-	73
(topical review)	95	change in the Basolateral Membrane Domain of Rat	
Broillet, MC., Horisberger, JD.: Basolateral Mem-	,,,	Jejunal Enterocyte	12
brane Potassium Conductance of A6 Cells	1		13
Coleman, L., see Pollard, C.E., et al	275	Peracchia, C., see Shen, L., et al.	21
Cooper, K.E., see O'Grady, S.M., et al.		Petersen, O.H., see Thorn, P.	63
Danaldson D.L. and Shan J. at al.	159	Petersen, O.H., see Wakui, M., et al	179
Donaldson, P.J., see Shen, L., et al.	21	Pierce, S.K., see Politis, A.D.	169
Faelli, A., see Orsenigo, M.N., et al	13	Politis, A.D., Pierce, S.K.: Specific Protein Phosphoryla-	
Forgo, J., see Reshkin, S.J., et al.	227	tion Occurs in Molluscan Red Blood Cell Ghosts in	
Girsch, S.J., see Shen, L., et al	21	Response to Hypoosmotic Stress	169
Goldberg, A.F.X., Miller, C.: Solubilization and Func-		Pollard, C.E., Harris, A., Coleman, L., Argent, B.E.:	
tional Reconstitution of a Chloride Channel from Tor-		Chloride Channels on Epithelial Cells Cultured from	
pedo Electroplax	199	Human Fetal Epididymis	275
Gradmann, D., see Mummert, H	255	Pressel, D.M., Misler, S.: Role of Voltage-Dependent	
Gradmann, D., see Mummert, H	265	Ionic Currents in Coupling Glucose Stimulation to In-	
Harris, A., see Pollard, C.E., et al	275	sulin Secretion in Canine Pancreatic Islet B-Cells	239
Hashimoto, A., see Kotera, T., et al	43	Rae, J.L., see O'Grady, S.M., et al	159
Hilden, S.A., Madias, N.E.: Effect of Sulfhydryl Com-		Reshkin, S.J., Forgo, J., Murer, H.: Apical and Basolater-	10)
pounds on ATP-Stimulated H ⁺ Transport and Cl ⁻		al Effects of PTH in OK Cells: Transport Inhibition,	
Uptake in Rabbit Renal Cortical Endosomes	139	Messenger Production, Effects of Pertussis Toxin, and	
Horisberger, JD., see Broillet, MC.	1	Interaction with a PTH Analog	227
			227
Hotz-Wagenblatt, A., see Mehta, P.P., et al.	207	Roper, S.D., see McBride, D.W. Jr.	85
Kase, H., see Wakui, M., et al	179	Rose, B., see Mehta, P.P., et al	207
Kinnally, K.W., see Antonenko, Y.N., et al	151	Shalloway, D., see Mehta, P.P., et al.	207
Kotera, T., Hashimoto, A., Ueda, S., Okada, Y.: Whole-		Shen, L., Shrager, P., Girsch, S.J., Donaldson, P.J., Perac-	
Cell K + Current Activation in Response to Voltages		chia, C.: Channel Reconstitution in Liposomes and	
and Carbachol in Gastric Parietal Cells Isolated from		Planar Bilayers with HPLC-Purified MIP26 of Bovine	
Guinea Pig	43	Lens	21
Kuryshev, Yu.A., see Mozhayeva, G.N., et al	113	Shrager, P., see Shen, L., et al.	21
Lindemann, B., see Avenet, P	33	Smith, J.B., see Lyu, RM., et al	73
Loewenstein, W.R., see Mehta, P.P., et al	207	Smith, L., see Lyu, RM., et al	73
Lyu, RM., Smith, L., Smith, J.B.: Sodium-Calcium Ex-		Sokabe, M., see Nomura, K	53
change in Renal Epithelial Cells: Dependence on Cell		Soliven, B., Szuchet, S., Nelson, D.J.: Tumor Necrosis	
Sodium and Competitive Inhibition by Magnesium	73	Factor Inhibits K+ Current Expression in Cultured	
Madias, N.E., see Hilden, S.A.	139	Oligodendrocytes	127
Marty, A.: Calcium Release and Internal Calcium Regula-		Szuchet, S., see Soliven, B., et al	127
tion in Acinar Cells of Exocrine Glands (topical review)	189	Tedeschi, H., see Antonenko, Y.N., et al	151
McBride, D.W., Jr., Roper, S.D.: Ca ²⁺ -Dependent Chlo-	107	Thorn, P., Petersen, O.H.: Activation of Voltage-Sensitive	
	85	Ca ²⁺ Currents by Vasopressin in an Insulin-Secreting	
ride Conductance in <i>Necturus</i> Taste Cells	0.5	Cell Line	63
Mehta, P.P., Hotz-Wagenblatt, A., Rose, B., Shalloway,		Tosco, M., see Orsenigo, M.N., et al.	13
D., Loewenstein, W.R.: Incorporation of the Gene for			43
a Cell-Cell Channel Protein into Transformed Cells		Ueda, S., see Kotera, T., et al	43
Leads to Normalization of Growth	207	Wakui, M., Kase, H., Petersen, O.H.: Cytoplasmic Ca ²⁺	
Miller, C., see Goldberg, A.F.X.	199	Signals Evoked by Activation of Cholecystokinin Re-	
Misler, S., see Pressel, D.M	239	ceptors: Ca ²⁺ -Dependent Current Recording in Inter-	4.70
Mozhayeva, G.N., Naumov, A.P., Kuryshev, Yu.A.: Va-	-	nally Perfused Pancreatic Acinar Cells	179
riety of Ca ²⁺ -Permeable Channels in Human Carcino-			
ma A431 Cells	113		
Mummert, H., Gradmann, D.: Action Potentials in Aceta-			
bularia: Measurement and Simulation of Voltage-			
Gated Fluxes	265	Covered in Current Contents, SCI, ASCA and ISI BIOME	ED